WHAT IS CLAIMED IS:

1. A method comprising:

super-cooling a solute to produce a pre-conditioned solute, and using the pre-conditioned solute as a heat exchange medium;

wherein the step of super-cooling alters a heat absorption rate of the solute, such that the pre-conditioned solute has an increased heat absorption rate as compared to the solute prior to conditioning.

2. A system comprising:
a tank capable of holding a predetermined amount of liquid;
a circulator capable of circulating said liquid;
a refrigeration system capable of cooling said liquid; and
a pre-conditioned solute having an altered heat absorption rate.

3. The system as in Claim 2, wherein said pre-conditioned solute is a solute having been conditioned by being super-cooled at an average rate of at least about 6.5°C per minute.

4. The system as in Claim 2, wherein said pre-conditioned solute is a solute having been conditioned by being super-cooled from room temperature to a temperature of less than about -23°C.

5. The system as in Claim 2, wherein said pre-conditioned solute is a solute having been conditioned by being super-cooled from room temperature to between about -23°C and -26°C.

6. The system as in Claim 2, wherein said pre-conditioned solute is a solute having been conditioned by being super-cooled at an average rate of between about 6.5°C and 8.5°C per minute.

7. The system as in Claim 2, wherein said pre-conditioned solute is a solute having been conditioned by being super-cooled, for at least a portion of time, at an average rate of at least about 17°C per minute.

8. The system as in Claim 2, wherein the heat absorption rate of the pre-conditioned solute is about 135 BTU at a temperature of between about -23°C

and -26°C.

9. The system as in Claim 2, wherein at least a portion of the pre-conditioned solute remains in a super-cooled state, such that the pre-conditioned solute exhibits no spike in temperature upon subsequently being cooled from room temperature to between about -23°C and -26°C.

10. The system as in Claim 2, wherein said pre-conditioned solute includes propylene glycol.

11. The system as in Claim 10, wherein the pre-conditioned solute includes:
about 50 per cent water;
about 50 percent propylene glycol; and
about 1 percent surfactant.

12. The system as in Claim 2, wherein said pre-conditioned solute includes glycerol.

13. A heat exchange medium comprising a liquid having an altered heat absorption rate.

14. The heat exchange medium as in Claim 13, wherein the heat absorption rate of said liquid is altered by a process including super-cooling a liquid with an unaltered heat absorption rate at an average rate of at least about 6.5°C per minute.

15. The heat exchange medium as in Claim 13, wherein the heat absorption rate of said liquid is altered by a process including super-cooling a liquid with an unaltered heat absorption rate to a temperature of less than about -23°C.

16. The heat exchange medium as in Claim 13, wherein the heat absorption rate of said liquid is altered by a process including super-cooling a liquid with an unaltered heat absorption rate from room temperature to between about -23°C and -26°C.

17. The heat exchange medium as in Claim 13, wherein the heat absorption rate of said liquid is altered by a process including super-cooling a liquid with an unaltered heat absorption rate at an average rate of between about 6.5°C and 8.5°C per minute.

18. The heat exchange medium as in Claim 13, wherein the heat absorption rate of said liquid is altered by a process including super-cooling a liquid with an unaltered heat absorption rate, for at least a portion of time, at an average rate of at least about 17°C per minute.

19. The heat exchange medium as in Claim 13, wherein the altered heat

absorption rate of the liquid is about 135 BTU at a temperature of between about -23°C and -26°C.

20. The heat exchange medium as in Claim 13, wherein at least a portion of said liquid remains in a super-cooled state, such that said liquid exhibits no spike in temperature upon subsequently being cooled from room temperature to between about -23°C and -26°C.

21. The heat exchange medium as in Claim 13, wherein said liquid includes propylene glycol.

22. The heat exchange medium as in Claim 21, wherein said liquid includes:
about 50 per cent water;
about 50 percent propylene glycol; and
about 1 percent surfactant.

23. The heat exchange medium as in Claim 13, wherein said liquid includes glycerol.